



Illinois Chapter

Associated Public Safety Communications Officers

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President:

Sherrill Omberg
Des Plaines/Park Ridge
Emergency Comm. Center
1420 Miner St.
Des Plaines, IL 60016
708-391-5666

1st Vice President:

Steven Miller
Illinois State Police Com.
531 Sangamon Ave.
Springfield, IL 62702

May 24, 1993

Ms. Donna R. Searcy
Secretary
1919 M. Street, N.W., Room 222
Federal Communications Commission

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Before the
Federal Communications Commission
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
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In the Matter of)
Replacement of Part 90)
by Part 88 to Revise)
the Private Land Mobile)
Radio Services and Modify)
the Policies Governing Them)

PR Docket No. 92-235

COMMENTS OF
ILLINOIS CHAPTER
ASSOCIATED PUBLIC SAFETY

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To: The Commission

COMMENTS

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

The Illinois Chapter of the Associated Public Safety Communications Officers, Inc. (IAPCO) submits its comments in response to the Commission's Notice of Proposed Rule Making in this proceeding.

Following extensive study of the proposals set forth in the Federal Communications Commission's Notice of Proposed Rule Making ("NPRM") Docket

cornerstones upon which the Commission can formulate the "refarming" of the private land mobile frequency bands below 512 MHz.

2. The Southern Lake Michigan (Region 54) 800 MHz Regional Planning effort was one of the first in the country. Over a hundred Public Safety agencies from forty-three counties in the states of Wisconsin, Illinois, Indiana and Michigan began monthly meetings in 1987. The Region 54 plan was the fourth plan approved by the Commission. Shortly thereafter, the Region 13 (State of Illinois) Plan was submitted and approved. The Public Safety agencies of Illinois are thus well aware of the efforts of the Commission to provide spectrum relief to the providers of critical law enforcement, fire protection and emergency medical services.

3. We are also acutely aware of the costs of acquiring the technology and equipment needed to implement the Commission's proposals. While the 240 NPSPAC channels have been available to Illinois' agencies since 1989, fewer than five applications have been filed and approved for licensing. The reason for this paucity of interest is simply the financial burden of acquiring a complete, new 800 MHz radio system.

I. Graceful Migration to New Technologies

4. IAPCO endorses Option A of the LMCC's Consensus Plan for migration to narrow band technologies in the VHF and UHF portions of the spectrum. This option would provide immediate relief to the pressures currently being experienced on spectrum use in Illinois. While not creating as many new channels as soon as Option B, or the Commission's plan proposed in the NPRM, Option A creates channels that will be usable due to its graceful migration and backward compatibility characteristics. This option gives agencies the ability to replace parts of their radio

systems as annual budgets allow, rather than requiring a total replacement of a system during one or two fiscal years.

5. We do not agree with the dissenters within the LMCC who are concerned with the fewer number of channels created by Option A. Since the approval of the Regional Plans, many larger agencies and consolidated Public Safety communications centers have been planning to acquire 800 MHz trunked radio systems, albeit a slow and painstaking process. As these systems are brought on line, those agencies will be required to vacate their VHF and UHF channels and return these frequencies to the statewide pool. Therefore, there will be more actual spectrum relief in the VHF and UHF bands than merely anticipated as a result of the adoption of narrowband technology.

6. IAPCO also endorses the LMCC's recommendation under Option A that the Commission institute a follow-up rule making toward the latter half of this decade to assess the benefits of conversion to 6.25 kHz bandwidths. The transmission of images and geographic information to field units, for example, requires wider bandwidth capability. We believe it is too early to estimate the popularity of these emerging applications among Public Safety agencies. We thus believe that it too early to adopt a specific 6.25 kHz channelization plan that could preclude their implementation.

II. Restrictive ERP/HAAT Limits

7. While simplification of the frequency coordination process is a desirable goal, we believe that it is subordinate to the design and engineering of efficient and effective mobile radio systems. For this reason, IAPCO recommends that the Commission abandon its plans to impose standardized limits on antenna power and

height.

8. Public Safety agency service areas do not conform to uniform areas of a specified radius around a transmitter site. Their need for voice and data communications often extends beyond their actual jurisdictional boundaries. For example, an ambulance crew tending an accident victim may require communication links to a trauma center in another county.

9. Many radio systems in Illinois require wide area coverage. These include multi-agency, multi-jurisdictional systems as well as statewide single agency systems. The Illinois State Police is representative of the latter. Du-Comm (DuPage Public-Safety Communications) is representative of the former. If either entity were restricted to the ERP/HAAT limits proposed by the NPRM, they would necessarily have to re-engineered with several additional tower sites at an unaffordable cost.

10. IAPCO is in agreement with the LMCC's proposal outlined in paragraph 26 of the Consensus Plan. Part 1 of the procedure (the "safe harbor" table) provides guidelines for the agencies and coordinators to use when determining co-channel or adjacent channel interference potentials. Part 2 of the procedure (coverage contour maps) provides a more exact method of economically extending wider area coverage to those applicants who need it, while reducing channel interference problems. We have found this procedure to be very effective in the application process for the 821-824 MHz channels.

SUMMARY

IAPCO supports the Commission for instituting this proceeding and believes it to be a painful but necessary measure. The technical changes proposed will impose

financial hardship on all users in the form of changing out all existing equipment; possible addition of communication sites for wide area systems, such as regions and counties; and increase of maintenance costs including additional manpower.

It would be in the best interest of the Public Safety Radio Services that a separate rule part be set up and that flexibility be had in assigning future licenses at a Regional level. Since the first Regional Planning groups were primarily concerned with 800 MHz systems, IAPCO feels that a new planning process should be started in regards to this proceeding. Illinois has two regional planning committees (13 & 54) within its boundaries and each has its own individual needs.

By proposing a separate rules part for Public safety (i.e. Part 89), individual technical parameters for frequencies below 512 MHz could be amended to the existing plans. The coordination of frequencies and migration issues (time frames) could be managed at the local level. As it was stated in the National Public Safety Planning Advisory Committee (NPSPAC) report, dated September 9, 1987, adapting service rules and standards on a national basis may be designed to meet the requirements of New York City or Washington, D.C., have little relevance to what may be required in Hawaii, Alaska, the wilderness areas of Idaho, or the badlands of the Dakotas.

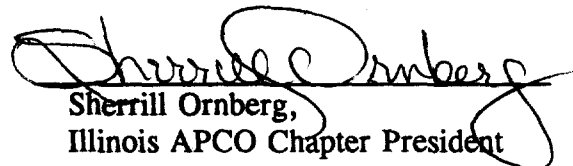
Proposals to eliminate service blocks and make all services eligible on all channels will require a vast amount of change in the frequency coordination process to protect all users and ensure effective spectrum utilization. Local Government Radio Service, Police Radio Service, Fire Radio Service, Highway Maintenance Radio Service, Forestry Conservation Radio Service and Emergency Medical Radio Service could be the components of the Public Safety Radio Services. IAPCO supports APCO as the recognized sole coordinator of all Public Safety frequencies except those frequencies between 450 and 470 MHz that are allocated to the Emergency Medical

Services. We support IMSA/IAFC as coordinator of the Emergency Medical Service frequencies.

As for Exclusive Use, we are in favor of it. This also could be involved in the Regional Planning process. With the defined 50 mile intervals, this could present problems in the northeast quadrant of Illinois or any other areas adjacent to a large body of water (Region 54-Lake Michigan). The Regional Planning Committee, Region 54, would be technically astute so that real world decisions on granting wide area exclusive use could be limited to realistic assessments of where frequencies are actually used and to realistic channel loading numbers.

The Illinois Chapter of APCO is pleased to be given the opportunity to offer these comments, and again, commend the Commission for the courage to enter this most important and needed process.

Respectfully submitted,


Sherrill Ornberg,
Illinois APCO Chapter President

attachments: Letter from:

City of Chicago Police Department
County of Lake Radio Department
Forest View Fire Department
DuPage Public Safety Communications



COUNTY OF LAKE RADIO DEPARTMENT

1303 NORTH MILWAUKEE AVENUE

LIBERTYVILLE, ILLINOIS 60048

March 12, 1993

Mr. Tony Tricoci
Manager of Telecommunications
Illinois State Toll Highway Authority
One Authority Drive
Downers Grove, Illinois 60515

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MAR 15 1993
TELECOMMUNICATIONS

RE: Notice of Proposed Rule Making, Docket 92-235

Dear Mr. Tricoci:

The proposed rule changes requiring existing users of UHF and VHF channels to reduce transmitter frequency deviation and power levels by January 1996 would be financially devastating to countywide system users such as Lake County. We would be forced to acquire land, erect towers, and purchase additional base stations to split up our system geographically in order to comply with the reduction in transmitter power and deviation.

The proposed rule changes may be necessary but the three year time frame is unreasonable. While it may be technically possible to reduce transmitter frequency and deviation, I don't think the technology is available to effectively reduce receiver channel spacing. Even if such technology becomes available, we would have to replace all of our existing equipment. We have hundreds of mobiles and portables. The replacement cost of all of our equipment in three years would be prohibitive.

I have not heard of any vendor announcement that narrow band equipment

FOREST VIEW FIRE DEPARTMENT
7010 W. 46TH STREET
Forest View, ILL. 60402
708 759-1110

COMMUNICATIONS

Mr. Tony Tricoci
Manager of Telecommunication
Ill. State Toll Highway Authority
One Authority Drive
Downers Grove, Ill. 60515

Dear Sir:

Reference the Ill Chapter APCO letter on the proposed FCC changes. The proposal to go to 5 Khz spacing in the VHF band if it includes the Public Safety Sector is not workable. There is about 25 towns on the existing Fire Band of 154.250 Mhz. Years ago when the Fire Service needed a Mutual Aid Frequency. the FCC gave Northern Ill. the 154.265 Mhz

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DU-COMM

DuPage Public Safety Communications



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136 N. County Farm Road
Wheaton, Illinois 60187-3992
(708) 260-7500
FAX (708) 665-4893

Richard H. Tuma
Director

March 23, 1993

Ms. Donna R. Searcy
Secretary
Federal Communications Commission
1919 M Street N.W.
Room 222
Washington, D.C. 20554

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RE: PR Docket # 92-235

Dear Ms. Searcy,

DU-COMM (DuPage Public Safety Communications) is an Intergovernmental Agency formed in 1975 to provide Emergency Communication Services to several Police, Fire and Emergency Medical Departments. Currently, DU-COMM serves 27 Agencies covering about 450,000 residents of DuPage County. We are located 25 miles southwest of the city of Chicago.

We utilize a combination of UHF, VHF, 800 MHz, and microwave systems to communicate to our member agencies. This communications system is comprised of 9 towers, 37 transmitters and 120 receivers, as well as over 3,000 portables, pagers and mobile units. The systems were designed to provide a good level service, officer safety, expanding jurisdictional boundaries, and affordability to our public safety agencies.

While we favor the opportunity through this proposal to obtain additional channels, we are concerned about the costs and time frame associated with this proposal. We concur that something has to be done in order to provide Public Safety sufficient frequencies in order to protect the citizens we represent.

The narrowbanding will force us to replace almost every piece of radio equipment we currently have on our system as well as the equipment our Police and Fire departments currently utilize. This will be a substantial financial

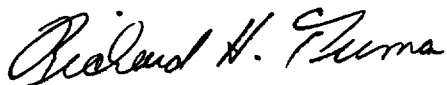


impact on all of us, especially considering the current economy. Many of our departments have been forced to utilize equipment longer in order to keep within budgetary constraints. The thought of having to replace all their equipment has made these department heads very apprehensive.

If there is no financial aid available, we would have to replace our current system under two conditions. First, that the equipment we purchase now be capable of performing under the narrowbanding standards as well as under current standards. Secondly, the migration period be twelve (12) to fifteen (15) years in order for it to fall within normal replacement cycles. Without these two conditions being met, we could not comply with the new proposed standards.

We are asking you to consider these issues in your decision process so that as a Public Safety Agency we can continue to provide a safe environment for our agency personnel and the taxpayers we serve.

Sincerely,

A handwritten signature in cursive script, reading "Richard H. Tuma".

Richard H. Tuma
Director

CITY OF CHICAGO / DEPARTMENT OF POLICE

1121 South State Street
Chicago, Illinois 60605

(312) 744-4000

Text Telephones

(312) 922-1414 (24 Hrs. & Emergency)
(312) 744-8006 (Business Hours)



March 27, 1993

Mr. Tony Tricoci
Chairman
Illinois APCO Part 88 Comments Committee

Manager of Telecommunications
Illinois State Toll Highway Authority
One Authority Drive
Downers Grove, Illinois 60515

Regarding: FCC Proposed Rule Making Part 88

Dear Mr. Tricoci:

The Chicago Police Department has read the open letter to APCO members regarding the Federal Communications Commission's proposed rule making replacing Part 90 with Part 88.

The following three (3) pages present this Department's position, first with a summary page, and succeeded by two (2) pages which comment on each of the five (5) sections.

Thank you for your efforts on behalf of this member of the community of public safety agencies.

Sincerely;

Robert G. Fitzsimmons
Assistant Deputy Superintendent
Communications Division

Attachment

cc: M. Celeski

Richard M. Daley, Mayor
Matt L. Rodriguez, Superintendent of Police

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27 MARCH 1993

COMMENTS REGARDING NOTICE OF PROPOSED RULE MAKING
REPLACING PART 90 WITH PART 88

PAGE 1 OF 3

The Chicago Police Department Communications and Electronics Maintenance Divisions thank the Commission for this opportunity to comment on the Notice of Proposed Rule Making Replacing Part 90 with Part 88.

The Chicago Police Department has reviewed the Notice of Proposed Rule Making Replacing Part 90 with Part 88 and agrees that conservation of spectrum and modernization are required. However, certain aspects of Part 88 will have a detrimental financial impact on the Chicago Police Department and its operations.

The Chicago Police Department's communication system was designed to give the citizens of Chicago the fastest and most efficient Police/Fire/Ambulance service in the world. It controls over 3,000 vehicles covering 224 square miles and serves a population of over 3,500,000.

The principal system utilizes 53 UHF and VHF radio frequencies, 22 base transmitter locations with 55 satellite, multiple-receiver stations. A second system employs the 800 MHz spectrum for a 5-channel, trunked, digital, voice-encrypted radio network. A third system utilizes 800 MHz to operate a mobile data terminal system which is used for information requests such as license/name/vehicle identification checks. Future plans include operation of mobile/portable data terminals in conjunction with a new Computer-Aided Dispatch System.

The magnitude of the impact, and the Chicago Police Department's ability to comply, while maintaining its primary mission to public safety, depend on a long-term approach to implementation of new technology when it becomes industry standard. The change to narrowband technology, for instance, will require that the Chicago Police Department completely replace all of its radio dispatch system below 512 MHz.

The Chicago Police Department has examined each of the five sections and presents its concerns in the following paragraphs.

A. SPECTRUM EFFICIENCY STANDARDS

CHICAGO POLICE DEPARTMENT

27 MARCH 1993

COMMENTS REGARDING NOTICE OF PROPOSED RULE MAKING
REPLACING PART 90 WITH PART 88

PAGE 2 OF 3

● The estimated cost to replace the entire system without change to the configuration or power output is \$21.6 million. This estimate does not include replacement costs to other Chicago public safety

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COMMENTS REGARDING NOTICE OF PROPOSED RULE MAKING
REPLACING PART 90 WITH PART 88

PAGE 3 OF 3

D. TECHNICAL AND OPERATIONAL RULE CHANGE

● Radio coverage cannot be maintained in a major city like Chicago, which has a large population of skyscrapers within its geographic area following the proposed reduction of power and antennae height.

● The Chicago Police Department's compliance with power reductions and antennae height restrictions will significantly increase the cost of providing coverage in a city environment.

E. MISCELLANEOUS PROPOSALS

● Paragraph 25 requires that modifications be made to existing systems to reduce their transmitter deviation to no more than 3 KHz by 1 January 1996. The Joint Commenters suggest that this " . . . can be accomplished without great expense . . . "

● The Chicago Police Department believes that current equipment standards do not allow field modifications to be made with reliability.